REMARKS

In an Office Action mailed October 27, 2003, pending claims 1-14 and 28-39 were examined wherein claims 28-39 were allowed and claims 1-3, 5 and 7-13 were rejected. Claims 4 and 6 were objected to. In response, claims 2, 4 and 6 are herein amended and a new apparatus claim 40 is herein presented. Claim 40 recites subject matter of previously elected Group I. Applicants respectfully request the reconsideration and allowance thereof in view of the remarks provided herein.

Claims 1, 7-11 and 13 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,770,336 to Choi (U.S. Patent 5,770,336). Choi was characterized as teaching a mask having the recited structure of the mask of claim 1. However, the rejection did not identify what element in the Choi mask is a stress control layer. Further, the words "stress" and "stress control" do not appear in the Choi patent. Choi does not teach or suggest a layer for reducing stress and does not recognize a need for reducing stress, much less a solution to the unrecognized issue. Choi also teaches in Fig. 4b the use of a mask 21 to form diffusion regions 22 in a substrate 20. The diffusion regions 22 were characterized as a "doped layer" and therefore Choi taught an "ion absorbing layer" that is recited in claim 1. Applicants respectfully submit that the formation of diffusion regions is not analogous to "an ion absorbing layer overlying the stress control layer for absorbing radiation ions to improve material stability of the stress control layer and the thin membrane layer" as recited in claim 1. Choi does not have the distinct elements of a substrate, an overlying thin membrane layer, an overlying stress control layer and an overlying ion absorbing layer as recited in claim 1. Rather Choi discloses a mask having a substrate with distinctly separated areas therein containing dopants. The dopant areas are determined by a mask 21. Overlying the substrate is a conductive layer 23. The Choi mask therefore has only two layers in areas not masked by the oxide film 21 mask. In areas where the mask is placed, the recited three layers overlying a substrate is not taught or suggested by Choi. Therefore, a prima facie case of obviousness has not been made. Choi was also characterized as teaching the recited materials for the layers. Applicants respectfully submit that the materials TaSiN, TaN, TaSiO and Cr as recited in claim 10 are not taught or suggested by Choi. In particular, at Col. 4, lines 44-48, Choi teach that an irregular shaped layer 23 that is in contact with the diffusions in the

substrate 20 is a refractory metal or diamond. As amended herein, dependent claim 2 recites a thin membrane layer having a recited thickness not taught by Choi. Dependent claim 2 further recites that the stress control layer and the thin membrane layer have substantially equal continuous widths between any two laterally successive openings, a further structural feature not taught or suggested by Choi. For the reasons provided herein, Applicants request the reconsideration and the withdrawal of the rejection of claims 1, 7-11 and 13. Applicants submit that new claim 40 is distinguishable from Choi for these reasons. Additionally, the Choi mask utilizes an upper layer having varying depths and widths between openings in the mask.

Dependent claims 2, 3, 5, 12 and 14 were rejected under 35 U.S.C. 103(a) as being unpatentable over Choi (U.S. Patent 5,770,336). Because these claims are dependent from claim 1, the differences provided above apply equally. Further, since Choi neither teaches nor recognizes the use of a stress control layer and thickness affects stress characteristics, a prima facie case for obviousness is not made by a conclusion that "these thicknesses are common in the art". Applicants request the reconsideration and the withdrawal of the stated rejection.

Claims 4 and 6 were objected to for being dependent from a rejected base claim. In response, Applicants have placed each of claims 4 and 6 in independent form. Therefore, Applicants request the allowance of claims 4 and 6.

Applicants respectfully request consideration of the amendments and the allowance of claims 1-14, thereby placing the application in condition for allowance. Should issues remain that might be subject to resolution through a telephonic interview, the Examiner is requested to telephone the undersigned at (512) 996-6839.

Respectfully submitted,

Robert L. King

Robert L. King
Reg. No.: 30,185
Tel. No.: (512) 996-6839
Fax No.: (512) 996-6854

SEND CORRESPONDENCE TO:
Motorola, Inc.
Law Department
Customer Number: 23125